

For more information on norovirus or to report individuals with vomiting, diarrhea, or fever associated with food consumption, contact:
 Email: fhdutyeh@sdcounty.ca.gov
 Phone: 619-338-2356
 Website: www.sdcdeh.org



NOROVIRUS CLEANING AND DISINFECTION

Norovirus causes a highly contagious gastrointestinal infection. It is easily spread through contact with contaminated surfaces. Any surface can become contaminated if touched by the hands of an infected individual. Surfaces in direct contact with vomit or fecal material from an infected person are of highest concern. Such areas should be treated as biohazardous. Disinfect as a matter of urgency. See below for directions. Surfaces that are frequently touched should be cleaned and sanitized often:

- Bathroom Surfaces
- Kitchen Surfaces
- Doorknobs
- Recreation Equipment
- Light Switch Plates
- Phones
- Computer Keyboards
- Railings
- Toys & Games
- Tables & Chairs
- Wheelchairs & Walkers
- Remote Controls

Effective Disinfectants

- **Fresh Chlorine Bleach:** Allow 10-20 minutes of contact time, then rinse with water
 - **200ppm** (parts per million): 1 tablespoon in 1 gallon water
Use for stainless steel, food/mouth contact items, toys
 - **1000ppm:** 1/3 cup in 1 gallon water
Use for nonporous surfaces, tile floors, counters, sinks, toilets
 - **5000ppm:** 1-2/3 cups bleach in 1 gallon water
Use for porous surfaces, wooden floors
- **Glutaraldehyde (0.5%):** Mix and apply according to the manufacturer's recommendations
- **Iodine (0.8%):** Mix and apply according to the manufacturer's recommendations

Ineffective Disinfectants

- Quaternary compounds, ethanol, anionic compounds

Specific Cleaning Methods

- **ALWAYS wear gloves and protect clothing**
- **Hard Surfaces**
 - Disinfect with bleach; then rinse with water if in food preparation area.
- **Carpet and Upholstered Furniture**
 - Visible debris should be removed with double-layered absorbent material and discarded in a red biohazard bag – handle carefully to minimize aerosols.
 - Carpet should be cleaned by heat inactivation using steam: 158°F for 5 minutes or 212°F for 1 minute (disinfecting with bleach may discolor carpet).
- **Linens, Clothing, and Textiles**
 - Remove visible debris from items before washing.
 - Handle contaminated items with gloves.
 - Keep contaminated items away from uncontaminated items.
 - Wash contaminated items in a pre-wash cycle followed by a regular wash cycle.
 - Use HOT water. Use detergent and bleach. Use oxygenated detergent alone when bleach cannot be used.
 - Dry contaminated items separately from uncontaminated items at a temperature greater than 170° F.
- **Surfaces Corrodible or Damageable by Bleach**
 - Use registered products effective against norovirus
EPA website: <http://www.epa.gov/oppad001/chemregindex.htm>

Cleaning Spills of Vomit or Feces

1. Use personal protective equipment (PPE = gloves, masks, gowns).
2. Cordon off area immediately.
3. Clean up visible debris using disposable absorbent material (paper towels or other disposable cloths).
4. Discard soiled items carefully in a red biohazard plastic bag to minimize aerosols.
5. Liberally clean and disinfect area and objects surrounding the contamination with an appropriate effective disinfectant (multiple applications may be required).
6. Take off gloves, gown, and mask, in that order, and discard before exiting contaminated clean-up area.
7. Place discarded PPE in the sealable red plastic biohazard bag.
8. Re-glove and transport bag to main trash with care – do not allow the bag to come into contact with clothing.
9. Always wash hands after handling any biohazardous material, trash, or waste.

Proper Handling

- Treat all waste as biohazardous – provide appropriate containment.
- Use chemicals in well-ventilated areas.
- Avoid contact between incompatible chemicals.
- Prevent chemical contact with food during cleaning.
- Handle contaminated material as little as possible and with minimal agitation to reduce aerosols.